



Complete Summary

TITLE

Acute stroke care: percentage of stroke patients with documented evidence of CT conducted within 24 hours of presentation to hospital during audit period.

SOURCE(S)

National Stroke Foundation. Acute stroke services framework 2008. Melbourne VIC: National Stroke Foundation; 2008. 37 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of stroke patients with documented evidence of computerised tomography (CT) conducted within 24 hours of presentation to hospital during audit period.

RATIONALE

A computerised tomography (CT) or magnetic resonance imaging (MRI) scan of the brain is a fundamental component of acute stroke care. This process of care applies to all patients with acute stroke and is required for specific diagnostic and management decisions. A CT scan of the brain is essential for confirmation of the clinical diagnosis of stroke and for identifying patients in whom anticoagulation and thrombolytic therapy is contra-indicated (e.g., intra-cranial haemorrhage). Evidence suggests the most cost effective strategy in acute stroke is for all patients to undergo immediate imaging.

PRIMARY CLINICAL COMPONENT

Acute stroke; computerised tomography (CT)

DENOMINATOR DESCRIPTION

All stroke patients (International Classification of Diseases, Tenth Revision [ICD-10] code) admitted to hospital during audit period

NUMERATOR DESCRIPTION

Number of stroke patients (International Classification of Diseases, Tenth Revision [ICD-10] code) with documented evidence of computerised tomography (CT) conducted within 24 hours of presentation to hospital during audit period (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- A systematic review of the clinical literature
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Organisation of services. In: Clinical guidelines for acute stroke management.](#)
- [Pre-hospital care. In: Clinical guidelines for acute stroke management.](#)
- [Early assessment and diagnosis. In: Clinical guidelines for acute stroke management.](#)
- [Acute medical and surgical management. In: Clinical guidelines for acute stroke management.](#)
- [Assessment and management of the consequences of stroke. In: Clinical guidelines for acute stroke management.](#)
- [Prevention and management of complications. In: Clinical guidelines for acute stroke management.](#)
- [Secondary prevention. In: Clinical guidelines for acute stroke management.](#)
- [Discharge planning, transfer of care and integrated community care. In: Clinical guidelines for acute stroke management.](#)

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Hospitals

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Unspecified

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Stroke is Australia's second single greatest killer after coronary heart disease and a leading cause of disability.

EVIDENCE FOR BURDEN OF ILLNESS

Australian Institute of Health and Welfare (AIHW). Australia's health 2006. Canberra ACT: Australian Institute of Health and Welfare (AIHW); 2006. 528 p.

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness
Timeliness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Stroke patients admitted to hospital during audit period

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

All stroke patients (International Classification of Diseases, Tenth Revision [ICD-10] code) admitted to hospital during audit period

Exclusions

Unspecified

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Institutionalization

DENOMINATOR TIME WINDOW

Time window brackets index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Number of stroke patients (International Classification of Diseases, Tenth Revision [ICD-10] code) with documented evidence of computerised tomography (CT) conducted within 24 hours* of presentation to hospital during audit period

*'Within 24 hours' is the documented time of CT as recorded in the hospital notes compared to the time at admission or presentation to hospital.

Centres with access to magnetic resonance imaging (MRI) may wish to collect data on first scan undertaken (CT or MRI). Consideration to degree of access to imaging facilities should be considered (e.g., for those without onsite access).

Exclusions

Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

External comparison at a point in time

External comparison of time trends

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Computerised tomography (CT) of brain within 24 hours.

MEASURE COLLECTION

[Performance Indicators for Acute Stroke](#)

DEVELOPER

National Stroke Foundation (Australia)

FUNDING SOURCE(S)

National Stroke Foundation (Australia)

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

National Stroke Audit Advisory Committee (2007) involving 18 people with expertise in clinical care, policy, administration and methodology. Consumer input was also included.

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Unspecified

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2002 Jan

REVISION DATE

2008 Jan

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

National Stroke Foundation. Acute stroke services framework 2008. Melbourne VIC: National Stroke Foundation; 2008. 37 p.

MEASURE AVAILABILITY

The individual measure, "Computerised Tomography (CT) of Brain within 24 Hours," is published in "Acute Stroke Services Framework 2008." This document is available in Portable Document Format (PDF) at the [National Stroke Foundation Web site](#).

For more information, contact the National Stroke Foundation at Level 7, 461 Bourke Street, Melbourne VIC 3000; Phone: (03) 9670 1000; Web site: www.strokefoundation.com.au.

COMPANION DOCUMENTS

The following is available:

- National Stroke Foundation. Acute stroke services framework summary. Melbourne VIC: National Stroke Foundation, 2008. 6 p. This document is available in Portable Document Format (PDF) at the [National Stroke Foundation Web site](#).

For more information, contact the National Stroke Foundation at Level 7, 461 Bourke Street, Melbourne VIC 3000; Phone: (03) 9670 1000; Web site: www.strokefoundation.com.au.

NQMC STATUS

This NQMC summary was completed by ECRI Institute on April 9, 2009. The information was verified by the measure developer on July 23, 2009.

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